

ABSTRACT

[0036] The invention is directed to a device for calibrating an optical
5 detection channel for a two-dimensional, spatially dependent measurement of
fluorescent or luminescent radiation in multi-specimen carriers. The object of the
invention, to find a novel possibility for calibrating an optical detection channel for a
two-dimensional, spatially dependent measurement of fluorescent or luminescent
10 radiation in multi-specimen carriers permitting a highly accurate calibration of the
spatial sensitivity distribution of the sensor array in the detection channel which is
economical, can be repeated at any time and can be adapted to the intensity level of
the measurement task, is met according to the invention by providing a plate-shaped
housing which is manufactured in the shape and size of the multi-specimen carriers
15 under examination and has, on its side facing the detection channel, a large-area
rectangular window whose size is adapted to the surface of the multi-specimen
carrier under examination, which surface is provided with wells, and there is a
luminescent foil inside the housing which is arranged parallel to the window so as to
cover its surface, and a power source and control units are provided in the housing
20 for controlling the luminescent foil, so that the luminescent foil can be controlled for
homogeneous emission of luminescent light through the window of the housing in
different intensity levels.